Amendments to the Claims:

A clean version of the entire set of pending claims, including amendments to the claims, is submitted herewith per 37 CFR 1.121(c)(3). This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-17. (Cancelled)

18. (Currently Amended) A tool for ~~the~~ distinguishing between bindings of different strengths between first and second microbiological entities, the tool comprising:

- first particles and second particles, at least one of which is magnetic,
- means for acting on the first and second particles to ~~thereby~~ cause the first and second particles to exert a mechanical stress on bindings between the first and second microbiological entities ~~and~~ to distinguish between the bindings of different strengths, the means for ~~exerting a mechanical stress~~ acting on the first and second particles comprising at least a magnetic field generator.

19. (Currently Amended) A tool according to claim 18 wherein both first and second particles are magnetic, and wherein a magnitude of a magnetic moment of each of the first particles is greater than a magnitude of a magnetic moment of each of the second particles ~~or the first particles are magnetic and the second particles are not magnetic~~.

20. (Currently Amended) The tool according to claim 18, wherein the first ~~and/or second~~ particles are coupled to [[a]] the first microbiological ~~entity~~entities, and the second particles are coupled to the second microbiological entities.

21. (Currently Amended) The tool according to claim 18 wherein the

microbiological entity is a bioactive molecule ~~such as a protein or a peptide~~.

22. (Currently Amended) The tool according to claim 18, wherein the means ~~for exerting a mechanical stress~~ for acting on the first and second particles includes means for exerting a fluid frictional force on the first or second particles.

23. (Currently Amended) The tool according to claim 18, further comprising an array of the first microbiological entities arranged on capture spots on a substrate.

24. (Currently Amended) The tool according to claim [[18]]23, further comprising means for generating an excitation that forces a lateral movement of the particles with respect to the array.

25. (Canceled)

26. (New) The tool of claim 18, wherein the first particles are coupled to the first microbiological entities, and the second particles are not coupled to any microbiological entities.

27. (New) The tool of claim 18, wherein the first particles are coupled to the first microbiological entities, and the second particles are coupled to third microbiological entities, wherein the second microbiological entities include capture molecules, wherein the first microbiological entities include first target molecules, wherein the third microbiological entities include second target molecules, and wherein the first and second target molecules may bind to different parts of the capture molecules.

28. (New) The tool of claim 19, wherein the first particles are coupled to the first microbiological entities, and the second particles are not coupled to any microbiological entities.

29. (New) The tool of claim 19, wherein the first particles are coupled to the first microbiological entities, and the second particles are coupled to the second microbiological entities.

30. (New) The tool of claim 29, wherein the first microbiological entities include target molecules, and the second microbiological entities include capture molecules.

31. (New) The tool of claim 20, wherein the magnetic field generator applies to the first and second particles a magnetic field whose magnetic vector has a varying direction as a function of time.

32. (New) The tool of claim 20, wherein the first microbiological entities include target molecules, and the second microbiological entities include capture molecules.

33. (New) A system for distinguishing between specifically-bound first and second microbiological entities and nonspecifically-bound first and second microbiological entities, the system comprising:

first magnetic particles coupled to the first microbiological entities;

second magnetic particles coupled to the second microbiological entities, wherein a magnitude of a magnetic moment of each of the first magnetic particles is greater than a magnitude of a magnetic moment of each of the second magnetic particles;

a magnetic field generator providing a magnetic field that operates on the first and second magnetic particles to exert a mechanical stress on bindings between the first and second microbiological entities, the stress being sufficient to separate the non-specifically bound first and second microbiological entities from each other while not separating the specifically-bound first and second microbiological entities from each other.

34. (New) The system of claim 33, wherein the magnetic field generator applies to the first and second magnetic particles a magnetic field whose magnetic vector has a varying direction as a function of time.

35. (New) The system of claim 33, wherein the first microbiological entities include target molecules, and the second microbiological entities include capture molecules.

36. (New) The system of claim 33, further comprising:

an array of the first microbiological entities arranged on capture spots on a substrate; and

wires on the substrate carrying a current that forces a lateral movement of the first and second magnetic particles with respect to the array.

37. (New) A system for distinguishing between specifically-bound first and second microbiological entities and nonspecifically-bound first and second microbiological entities, the system comprising:

first magnetic particles coupled to the first microbiological entities;

second magnetic particles not coupled to any microbiological entities, wherein a magnitude of a magnetic moment of each of the first magnetic particles is greater than a magnitude of a magnetic moment of each of the second magnetic particles;

a magnetic field generator providing a magnetic field that operates on the first and second magnetic particles to exert a mechanical stress on bindings between the first and second microbiological entities, the stress being sufficient to separate the non-specifically bound first and second microbiological entities from each other while not separating the specifically-bound first and second microbiological entities from each other.

38. (New) The system of claim 37, further comprising:

an array of the first microbiological entities arranged on capture spots on a

substrate; and

wires on the substrate carrying a current that forces a lateral movement of the first and second particles with respect to the array.